circuit for charging an on-board battery with the output voltage of the alternator, the detector circuit detecting the disconnection <u>based on a voltage difference between the output voltage</u> of the alternator detected when the switching transistor is turned off and the output voltage of the alternator detected when the switching transistor is turned on, as recited in original independent claim 1.

Vercesi relates to a battery-recharging system for a motor vehicle that indicates a disconnection between the output of the generator and the battery (col. 1, lines 27-35). As shown in Fig. 1 of Vercesi, the voltage regulator 3 includes a voltage supply 12 and has four terminals connected to the voltage regulator. Terminal A is connected to the output of the generator 2 and to an input of the supply 12 (col. 2, lines 17-21). The voltage regulator 3 also includes a voltage regulator circuit 14 with an input connected to the terminal A, and hence to the output of the generator (col. 2, lines 43-46). The voltage regulator further includes a control circuit 15 with a first input 15a connected to the terminal A and a second input 15b connected to the terminal L (col. 2, lines 52-55). The terminal L is connected to an indicator lamp 11 and to the voltage regulator 3. The lamp 11 is intended to be switched on (lit) when the switch 10 is closed and no current supplied to the generator (col. 2, lines 8-15).

In operation, the control circuit 15 monitors the potential difference between the terminals A and L of the regulator. If the potential difference exceeds a pre-established reference value when the generator is operating, the circuit 15 makes the transistor 13a conductive, causing the lamp to be lit (col. 2, lines 58-63). Thus, in contrast to the recitation in the rejected claims, disconnection of the charging circuit in Vercesi is detected by a comparison of a voltage at terminal A and a voltage at terminal L of the voltage regulator 3. Therefore, Vercesi does not disclose a detector circuit detecting the disconnection based on a voltage difference between the output voltage of the alternator detected when the switching transistor is turned off and the output voltage of the alternator detected when the switching

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transistor is turned on. Rather, the comparison of voltages at terminals A and L in Vercesi

has nothing to do with the status of the field current. Accordingly, Vercesi fails to disclose

each and every feature recited in the rejected claims. Therefore, withdrawal of the rejection

of claims 1-4 under 35 U.S.C. §102(b) is respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in

condition for allowance. Favorable reconsideration and prompt allowance of claims 1-4 are

earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place

this application in even better condition for allowance, the Examiner is invited to contact the

undersigned at the telephone number set forth below.

Respectfully submitted

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